

SUPPLEMENT TO THE CATALOGUE OF "NESTS AND
EGGS OF BIRDS FOUND BREEDING IN AUSTRALIA
AND TASMANIA."

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[Part I., March, 1891.]

Ninox connivens, Latham. Winking Owl.

Gould, Handbk. Bds. Austr., Vol. i., sp. 34, p. 71.

Although the present species is widely distributed over the Australian continent, but little knowledge has been gained of its nidification and eggs, and it is due to the exertions of Mr. George Barnard and his sons, of Daringa, Queensland, that I am enabled to give a description of this rare egg, taken at Coomoooolaroo, during September 1886. The nesting place was in a *Eucalyptus* the entrance of which was through the end of a small hollow spout opening into the main trunk of the tree; here Mr. Barnard's sons made an aperture with an axe, and the eggs two in number, were found deposited on the decaying wood near the bottom of the tree. Last year three more eggs of the same species were taken from this tree, in both instances being perfectly fresh. The egg of *Ninox connivens* is rounded in form, and pure white, the texture of the shell being very fine and the surface slightly glossy. Long diameter 1.84 inch, short diameter 1.61 inch.

Mr. W. B. Barnard informs me that he found a nest of this species, about eighteen inches down the hollow limb of a large *Eucalyptus*, containing three young ones, from which it may be inferred that like *N. boobook*, three eggs is the usual number laid by this bird for a sitting.

Hab. Australia, with the exception of North-west.

Ailuroedus viridis, Latham. The Cat-bird.

Gould, Handbk. Bds. Austr., Vol. i., sp. 277, p. 446.

The habitat of the Cat-bird is the dense scrubs of the coastal ranges of New South Wales. It is particularly plentiful at Cambewarra and the Kangaroo Valley, in the Illawarra District, and is found in favourable localities all through the southern portions of the coast ranges, becoming scarcer however as the boundary of the colony is approached. The rich brushes in the neighbourhood of the Clarence, Richmond, and Tweed Rivers are also strongholds of this species, and it is also found, but not so freely dispersed in the extreme south of Queensland. Although a common and well known bird for many years, being described

by Latham in 1802, as *Gracula viridis*, from specimens brought to England by Captain King, which were procured at Port Jackson, the authentic nest and eggs of this species appear until lately to have been unknown. Dr. Ramsay described a nest and eggs, said to belong to this species, in the Proceedings of the Linnean Society of New South Wales,* upon the authority of the late Mr. Ralph Hargrave who had taken them near Stanwell, in the Illawarra District, but Dr. Ramsay himself had some misgivings at the time as to their authenticity, on account of the comparatively small dimensions of the eggs for the size of the bird, doubts which I fully shared with him when I saw the specimens referred to some years afterwards.

The finding of the nest and eggs of a closely allied species, the Queensland Cat-bird, *Ailuroedus maculosus*, Ramsay, by Messrs. Cairn and Grant, from which the parent birds were shot, and which were described by me in the Proceedings of the Linnean Society of New South Wales,† dispelled at once any idea as to the nest and eggs of the so-called *A. viridis*, taken by Mr. Hargrave being authentic.

For an opportunity of examining an authentic nest and egg of the New South Wales, Cat-bird, *Ailuroedus viridis*, Latham, I am indebted to Mr. W. J. Grime, a most enthusiastic and persevering oologist, who recently procured two nests of this species on the Tweed River, and sent the following notes relative to the taking of them:—

“On the 4th of October, 1890, I was out looking for nests accompanied by a boy. I left him for a little while to go further in the scrub, and on my return he informed me he had found a Cat-bird’s nest with two eggs in, one of which he showed me, the other one he broke descending the tree. I went with him to the nest and found the old birds very savage, flying at us, and fluttering along the ground. The nest was built in a three pronged fork of a tree, about fourteen feet from the ground. The tree was only four inches in diameter, and was in a jungle or light scrub, about fifty yards from the edge of the open country. I felled the tree and secured the nest, of which there is no doubt as to its being authentic, as the old birds strongly objected to my taking it. The eggs had been sat on for a few days and were partially incubated.”

In a subsequent letter dated November the 8th, Mr. Grime writes, “To day I found another Cat-bird’s nest and drove the parent bird off it myself. I thought I had more eggs as the Cat-bird would not leave the nest until fairly *shaken* out, but when I examined the nest found two young birds in it, apparently just hatched a couple of days.”

* Proc. Linn. Soc. N.S.W., Vol. ii., (1877) p. 107.

† Proc. Linn. Soc., N.S.W., Vol. iii., Second Series, (1888) p. 117.

The nest of *Ailurædus viridis*, is a beautiful structure, being bowl-shaped, and composed exteriorly of long twigs, entwined around the large broad leaves of *Pteridia argyrodendron*, and other broad-leaved trees, some of the leaves measuring eleven inches in length by four inches in breadth. The leaves appear to have been picked when green, so beautifully do they fit the rounded form of the nest, one side of which is almost hidden by them. The interior of the nest is lined entirely with fine twigs. The nest of *Ailurædus viridis* is similar to that of *A. maculosus*, but larger, and both of them can readily be distinguished from those of any other Australian bird by the peculiarity of having large broad leaves used in the construction of the exterior portion of the nest.

The eggs of *A. viridis* are two in number for a sitting, oval in form, being but slightly compressed at the smaller end, of a uniform creamy-white very faintly tinged with green, the shell being comparatively smooth and slightly glossy. Length 1.66 inch x 1.2 inch.

Although the Cat-birds are usually included in the family of Bower-building birds, I have never known or heard of either species constructing a bower. This will cancel Dr. Ramsay's description of the nest and eggs of the Cat-bird, which I have given in the Australian Museum Catalogue of the "Nests and Eggs of Birds found breeding in Australia and Tasmania," p. 176.

Hab. Coastal Ranges of New South Wales and Southern Queensland.

SPHECOTHERES MAXILLARIS, *Latham*. Southern Sphecotheres.
Gould, Handbk. Bds. Austr., Vol. i., sp. 286, p. 467.

This species is widely dispersed through the brushes of the eastern coast of Australia, it is a well known species on the Richmond and Clarence Rivers, and Mr. Grime informs me it is fairly common on the Tweed River where it is locally known as the "Mulberry-bird," from the decided preference it evinces for that species of fruit amongst many others attacked by this bird. Mr. Grime has forwarded a nest and two eggs, taken on the 8th of November, 1890, together with the following notes. "I have found two nests this season of *S. maxillaris*, they were built in each instance on the "Swamp Tea-tree," at a height of about forty feet from the ground, the nests are attached by the rim to the thin branches of an outspreading bough, and what surprises me is how the eggs are not shaken out of the nest by the wind. The last nest I found, after climbing the tree to the limb on which the nest was placed, I reached out as far as I could on it and attached a piece of rope and then drew the limb to the main trunk and secured it, this brought the nest nearer, but above my head, so when I climbed farther up I could reach it, there were three eggs in the nest, but I broke one before reaching the ground."

The above nest is an open shallow structure rather irregularly and roughly formed on the exterior, but neatly rounded on the inside, and is composed entirely of the long pliant stems of a species of *Kennedyia*, it measures exteriorly seven inches and a-half in diameter by three inches and a-half in depth, internal diameter four inches, depth one inch and three-quarters. Eggs three in number for a sitting, oval in form of a dull apple-green, regularly spotted and blotched over the surface of the shell with different shades of reddish and purplish-brown, underlying blotches of purple appearing as if beneath the shell. Length (A) 1.25 x 0.9, (B) 1.25 x 0.89 inch. These eggs are paler, but more heavily blotched than the specimens taken by Mr. R. D. Fitzgerald on the Richmond River in November 1887, and subsequently described by him in the Proceedings of the Linnean Society of New South Wales, Vol. ii., Second Series, 1887, p. 970.

Hab. Eastern Queensland, Eastern New South Wales.

PTILOTIS FLAVICOLLIS, *Vieillot*. Yellow-throated Honey-eater.
Gould, Handbk. Bds. Austr., Vol. i., sp. 310, p. 508.

The habitat of the Yellow-throated Honey-eater is confined I believe to Tasmania and the islands of Bass's Straits, although it has been recorded from Victoria. I have never met with this bird anywhere on the mainland of Australia. Dr. L. Holden has kindly forwarded a nest and two eggs of this species, which he found on the 29th of November, 1890, at Circular Head, on the North-west Coast of Tasmania, accompanied with the following note:—"The nest of *P. flavicollis*, I send you was built against the main stem of a low, scraggy, and scanty box shrub, about three feet and a-half from the ground; the shrub was draped with vines of a climbing plant, some alive and green, others dead and brown, the latter serving to conceal by similarity the exterior of the nest. The Yellow-throated Honey-eater has been seen here gathering hair for its nest from the backs of cows and a pony belonging to me." The nest is an open cup shaped structure, outwardly composed of strips of bark, grasses, weeds, and sheep's wool, all matted together, and thickly lined inside with a layer of cow-hair, the walls of the nest being very much thicker than any I have met with belonging to other members of the genus *Ptilotis*, it measures exteriorly five inches in diameter, by three inches and a-half in depth; internal diameter two inches and a-half, by two inches in depth.

Eggs in this instance, two in number for a sitting, oval in form of a fleshy-buff ground colour, becoming darker towards the larger end where they are irregularly spotted with rounded clouded markings of reddish-chestnut, and underlying spots of purple appearing as if beneath the surface of the shell. Length (A) 0.95 x 0.7; (B) 0.91 x 0.7 inch.

Hab. Tasmania, Islands of Bass's Straits.

CALYPTORHYNCHUS SOLANDRI, *Temminck*. Solander's Black Cockatoo.

Gould, Handbk. Bds. Austr., Vol. ii., sp. 400, p. 18.

This, the smallest species of Black Cockatoo, has a most extensive range of habitat, being found alike in the dense scrubs of the coastal ranges of tropical and eastern Australia, as well as the open forest lands on the eastern margins of the plains of New South Wales. For an opportunity of examining an egg of this species I am indebted to Mr. E. H. Lane, who has taken several nests of this species near Dubbo, about two hundred and fifty miles North-west of Sydney, and has also sent a skin of the bird for identification. The eggs were laid on the dry pulverized wood in the hollow main trunks of the Eucalypts, at a height varying from twenty to forty feet from the ground. Several of the nests were about three feet down the trunk, and apertures had to be made in the trees with an axe, so as to secure the eggs. In no instance were the nests found in the limbs or spouts, but always in the main trunk of the tree. Mr. Lane has obtained in all six nests, four of which contained a single egg in each, the other two single young birds. Five nests were found during the months of March and April, and one in May; they were all obtained on the Springs and Wambangalang Stations, about twenty-six miles South-west of Dubbo.

The egg is an ellipse in form, slightly swollen at one end, pure white, the texture of the shell fine but lustreless; upon looking closely into the shell very minute pittings may be observed. Length 1.82 x 1.37 inch. Taken on the Springs Station at the latter end of April, 1880.

Hab. Eastern and South-eastern Australia.

EUPHEMA PETROPHILA, *Gould*. Rock-Parrakeet.

Gould, Handbk., Bds. Austr., Vol. ii., sp. 435, p. 76.

This species is plentifully dispersed over the coast line of South and South-western Australia, and the contiguous islands. Gilbert found it breeding "in the holes of the most precipitous cliffs," on Rottneest and other islands near Swan River in Western Australia. Mr. A. H. C. Zietz, the Assistant Director of the Adelaide Museum, was also successful in procuring specimens of these birds as well as the eggs in September 1890, on Spilsby Island, one of the Sir Joseph Bank's Group in Spencer's Gulf, South Australia, where he found this species breeding in holes in the flat, sandy, soil. Mr. Zietz also informs me that he has observed these birds on the tops of the rocks near the shore at Aldinga Bay, and that at the present time live specimens are exhibited for sale in the bird dealer's shops at Adelaide. The Trustees of the Australian Museum have recently received from

the Adelaide Museum, some of the specimens procured by Mr. Zietz. An average egg is rounded in form, white, earth stained, and measures 0.94 inch in length by 0.78 inch in breadth.

Hab. South Australia, and South-western Australia.

MYRISTICIVORA SPILORRHOA, *G. R. Gray*. White Nutmeg-Pigeon.
Gould, Handbk. Bds. Austr., Vol. ii., sp. 457, p. 114.

From the month of October until the end of March the Torres Straits or White Nutmeg Pigeon, during most seasons, is freely dispersed over the dense brushes and mangrove-lined mouths of the rivers of the North-eastern coast of Queensland. Mr. J. A. Boyd, of the Herbert River, has kindly forwarded me the eggs of this species, taken on North Barnard Island by Captain Proctor, at the latter end of last season, also the accompanying notes kindly communicated by Mr. Wm. T. White, of Greenfield, relative to the nidification of this fine pigeon.

"A few years ago these birds came to the scrubs on the Herbert River in great numbers, generally arriving about the beginning of September and remaining until the end of March, but during the last three or four years they have become very scarce, in fact, I did not see a score altogether last year. The decrease in their numbers is no doubt due to the wholesale slaughter of these poor birds during the breeding season, and, unless this is prevented, the Torres Straits pigeons will entirely disappear from this district within the next four or five years. I have found the eggs of these birds during November and December. The nest is a very rude structure, consisting simply of a few twigs laid across each other in the fork of a horizontal branch, generally not more than fifteen or twenty feet from the ground, and so open that the eggs (two in number) are visible from below. The birds appear to prefer Mangroves and Tea-trees, and do not crowd their nests together, although three or four pairs may sometimes build in the same tree. I have frequently found their nests fully twenty miles inland, but think most of them build very close to the sea."

Mr. Boyd also informs me that they breed sometimes in the open forest Eucalypti, and that he has obtained very young pigeons miles from the coast. Last year he did not observe any pigeons till after Christmas, but obtained two specimens this season on the 11th of September, and has since seen several small flocks. Mr. Boyd is of opinion that the cause of the pigeons not frequenting the Herbert River district so much as formerly is due to the felling of hundreds of acres of scrub that contained the berry-bearing trees on which they fed.

It is worthy of note that the nests of *Myristicivora spilorrhoea*, found by Captain Proctor, Mr. W. T. White, and the late Mr. John Macgillivray, each contained two eggs for a full sitting,

while those found by Gilbert at Port Essington either contained a single egg or a single young bird.

The eggs vary in shape from an ellipse to an elongated oval, are pure white, the texture of the shell being fine, one specimen being lustreless, the other slightly glossy. Length (A) 1·8 x 1·3 inch; (B) 1·83 x 1·2 inch.

It may not be out of place to mention here that migratorial birds are in some seasons more abundant in the localities they usually visit than others, which is not always due to climatic influences or an abundance of food. The Top-knot Pigeons (*Lopholaimus antarcticus*), especially, have been very numerous this season in New South Wales, my attention first being drawn to the fact by the unusually large number of these pigeons that were exposed for sale in the poulterers' shops about Sydney during July and August.

On the 9th of August some notes were contributed to the "Sydney Mail," referring to the unusual number of Top-knot Pigeons which were on the brushes at that time in the neighbourhood of Gosford, several of which had made nests and laid their eggs. Mr. W. J. Grime also informs me that "the Top-knot Pigeons were particularly plentiful this season in the neighbourhood of the Tweed River, and that flocks of them, numbering some thousands, could be seen during September, flying round at any time through the day from the mountains to the coast, and back." Mr. Boyd writes, "The Top-knot Pigeons have been very plentiful this season; they have not been so numerous since 1882."

This season has not been a better one than the last for the berry-bearing trees that provide the food for these pigeons, yet in both colonies has the Top-knot Pigeon been more than usually abundant this year.*

Hab. South Coast of New Guinea, Islands of Torres Straits, and off the Coast of North-eastern Queensland, Northern and North-eastern Queensland.

MACROPYGIA PHASIANELLA, *Temminck*. The Large-tailed Pigeon. *Gould, Handbk. Bds. Austr.*, Vol. ii., sp. 475, p. 148.

The Large-tailed Pigeon is freely dispersed throughout the rich brushes of the Eastern coast of Australia, from Cape York to the southern boundary of New South Wales. Young birds were obtained by Messrs. Cairn and Grant in the scrubs that clothe the sides of the Mulgrave and Russell Rivers in tropical Queensland during November 1887, and Meston in his Report of the Scientific Expedition to Bellenden-Ker Range in the near vicinity

* North, Proc. Linn. Soc., N.S.W., Vol. v., Second Series, (1890) p. 880.

records finding it breeding during February 1889, on the South Peak of the range at an elevation of from 4,000 to 5,000 feet, in the tops of Tree-ferns, each nest containing a single egg or young pigeon.

For an opportunity of examining an egg of this species I am indebted to Mr. W. J. Grime, who, in the brushes of the Tweed River, found a nest placed on a mass of "Lawyer Vines," (*Calamus australis*), about six feet from the ground from which he flushed the bird: the nest was a very primitive structure, being simply a few sticks placed crosswise, without any cavity, and barely sufficient to retain the egg in position. The egg is a true ellipse in form, pure white, the texture of the shell being fine and slightly glossy, length 1.35 x 0.97 inch. Mr. Grime informs me that in the neighbourhood of the Tweed River this pigeon feeds principally on the ink-weed or dye-berry, a species of *Phytolacca*.

Hab. Eastern Australia.

THRESKIORNIS STRICTIPENNIS, Gould. White Ibis.

Gould, Handbk. Bds. Austr., Vol. ii., sp. 539, p. 284.

Although by no means a common bird, the present species is widely distributed over nearly the whole of the Australian continent. Mr. K. H. Bennett has lately found the White Ibis breeding in a large extent of flooded country overgrown with tall dense *Polygonum* bushes, situated near the Lachlan River in New South Wales, and from some interesting notes made upon the spot I have extracted the following:—

"On the 30th of November 1890, I started with the intention of visiting the breeding place of *Geronticus spinicollis*, which to reach I had to ride through nearly three miles of flooded country, where the depth of water varied from a few inches to six feet. Some time before reaching my destination, I could see thousands of *G. spinicollis*, flying about and over the breeding place, but what chiefly attracted my attention was two white objects appearing as if the two large *Polygonum* bushes were covered with snow. As I approached I could see that they were colonies of the White Ibis, *Threskiornis strictipennis*, and when at last I reached the spot, I found it was a breeding place, but to my disappointment the nests only contained young ones in various stages, from just hatched to partly fledged. As I rode up to the bushes on which the nests were placed, the old birds of course flew off, and such of the young ones that were strong enough to do so scrambled out of the nests and attempted to conceal themselves in the dense tangled mass of *Polygonum* stems on which the nests were placed, but in doing so it was evident that numbers would perish, for I could see them suspended by the neck, wings, or legs in all direc-

tions, in their clumsy efforts to hide themselves. On a further search of the *Polygonum* scrub, which was of immense extent, I had the good luck to discover several other colonies, many of the nests containing eggs, though young birds were far more numerous. The various nests I examined contained from one to three eggs, but strange to say they were all in an advanced stage of incubation, no matter what the number was. I succeeded however, in obtaining nine eggs, three from one nest and two each from three others. In no instance did I observe more than three eggs or three young birds in any nest. The nests are similar in construction and material to those of *Geronticus spinicollis*, being nearly flat structures composed of long spiny sticks and twigs interlaced through one another, measuring about eighteen inches in diameter by six in height, the colonies however are smaller and more separated, each containing from ten to fifteen nests, whilst those of *Geronticus spinicollis*, are from fifty to a hundred and even more, this possibly is accounted for by the fact of the latter being infinitely more numerous.

“Having thus obtained the eggs of *Threskiornis strictipennis*, I went on to the breeding place of *Geronticus spinicollis*, several hundred yards distant, here as with the White Ibis, I found the young birds far more numerous than the eggs, but as the nests were in such numbers I had no difficulty in obtaining as many eggs as I required. This breeding place was of great extent, and there must have been thousands of young ones, the whole place being fairly alive with them as they scrambled off on my near approach, so much so, that the moving mass quite frightened my horse, and I had some difficulty in getting him near enough to the nests to reach the eggs. In trying to secrete themselves, I observed that numbers of the young birds shared the same fate as their white *confrères*, whilst numbers of dead ones in the same fix showed plainly that they had been disturbed on some previous occasion.”

Amongst several sets of the eggs of *Geronticus spinicollis* and *Threskiornis strictipennis*, now before me, specimens of the eggs of each bird could be picked out that for shape, size, and colour it would be impossible to distinguish those of one species from the other. The eggs of *Threskiornis strictipennis*, vary in shape from oval to pointed ovals, and are of a very faint greenish-white on the outer surface and of a dark green tint on the inner surface when held up against the light, the shell being minutely pitted all over, and lustreless.

A set of two measures as follows:—(A) 2·57 x 1·82 inch; (B) 2·57 x 1·75 inch. Another set of three measure:—(A) 2·55 x 1·76 inch; (B) 2·58 x 1·77 inch; (C) an elongate oval 2·67 x 1·7 inch.

Hab. The whole of Australia, except South-west.

PELECANOIDES URINATRIX, *Gmelin*. The Diving Petrel.
Gould, Handbk. Bds. Austr., Vol. ii., sp. 650, p. 483.

John Reinhold Forster and his son George Forster, who accompanied Captain Cook as naturalists during his second voyage in 1772 made drawings of this bird to which the native name of Tee-tee was applied; in Forster's Voyage, Vol. i., p. 189, it is referred to as the little Diving Petrel, a name by which it was subsequently described under, by Dr. Latham in 1785.* Later on †Gmelin inserted it in his Systema Naturæ, under the designation of *Procellaria urinatrix*, and in 1800 ‡Lacepede substituted the generic term *Pelecanoides* for that of *Procellaria*, which is generally used by authors for this species at the present time. The Diving Petrel has a most extensive range of habitat, and of no pelagic species found in the extreme southern seas, does so much doubt and difference of opinion exist amongst authors as to which, if any of the two so called allied species, *P. berardi* from Chili, and *P. garnotii* from Peru, should be included in its synonymy, in fact in both instances it is only a matter of the colour of the feet, a point in which all writers differ in describing them, and a slight difference in the size, characters which have been proved even in the same species not to be constant.

Temminck in his Planche Coloriées§ figures and describes *P. berardi*, and writes as follows:—"On doit réunir avec cette espèce, non-seulement le *Procellaria urinatrix* des auteurs, mais encore un autre, figuré très-récemment par M. Lesson, dans l'Atlas du voyage du capitaine Duperrey, et publié, pl. 46, sous le nom de *Puffin* ou *Puffinure de Garnot*. On trouve cette espèce sur les mers qui baignent les côtes du Chili; le *Pélécanotide plongeur* ou *Haladroma urinatrix* vit à l'extrémité méridionale des terres de la Nouvelle-Hollande et de la Nouvelle Zélande."

Gould in his Birds of Australia includes *P. garnotii* from Peru as a synonym of *P. urinatrix*, in which he is followed by Dr. Elliot Coues, who has written as follows in the Bulletin of the U.S. National Museum, after closely examining a large series of *Pelecanoides urinatrix*, brought to America by Dr. Kidder, from Kerguelen Island in 1875:—"As very strongly intimated in my paper, satisfactory diagnosis of the three currently reported species of this genus is wanting. Nor is my faith in their distinctness increased on finding that these specimens, which from the locality undoubtedly represent the original *P. urinatrix*, are fully up to the dimensions of the supposed larger *P. garnoti*, from the west coast of South America. Observed variation in the colour

* Latham, Gen. Syn. Bds., Vol. iii., pt. 2, p. 413 (1785).

† Gmelin, Systema Naturæ, I., p. 560 (1788).

‡ Lacepede, Mém. de l'Inst., p. 517 (1800).

§ Temminck, Planche Coloriées, Vol. v., pl. 517 (1838).

|| Coues, Bull. U.S. Nat. Mus. No. 2, "Contributions to the Natural History of Kerguelen Island made in connection with the American Transit of Venus Expedition, 1874-5, p. 36." (1875).

of the feet, which is one point that has been relied upon, lessens the probability of distinctness, especially as the ascribed colouration does not coincide in every case with the dimensions. The size and proportions of the examples examined, as carefully measured in the flesh by Dr. Kidder, warrant me in adducing the *P. garnoti* of Lesson as a synonym of *P. urinatrix*; to which I still refrain from adding the *P. berardi* of Quoy and Gaimard."

Mr. R. B. Sharpe however, holds a contrary opinion and in the "Account of the Collections made in Kerguelen's Land,"* after giving the measurements of a number of the so-called species from different localities, writes "My conclusions differ from those of Dr. Cones, inasmuch that I consider that *P. berardi* is nothing but the young of *P. urinatrix*, and that *P. garnoti* on the contrary must be held to be distinct on account of its very much larger size; at all events the examples from Western South America indicate a distinct race." Dr. Coppinger in the Cruise of the Alert, † records capturing a specimen of *Pelecanoides urinatrix* on the west coast of Patagonia.

However obscured the synonymy of *Pelecanoides urinatrix* appears to be at present, it is interesting to know that its habits and mode of nidification are not, owing chiefly to the many scientific expeditions that have been sent to Kerguelen Island to make observations during the Transit of Venus. During the voyage of H.M.S. Challenger, in 1874, Sir C. Wyville Thomson ‡ writes:—"It is to be seen on the surface of the water in Royal Sound when the water is calm in very large flocks. On two days when excursions were made in the steam pinnace, the water was seen to be covered with these birds in flocks, extending over acres, which were black with them."

Dr. Kidder, who accompanied the United States Transit of Venus Expedition sent to Kerguelen Island § in the same year, gives an account of their nesting habits, the eggs which he describes measure as follows:—1.62 x 1.15; 1.62 x 1.27; 1.66 x 1.26; 1.65 x 1.25. The Rev. A. E. Eaton || who accompanied the expedition sent to the same island by Her Majesty's Government, for the purpose of making observations during the Transit of Venus, writes as follows respecting the nidification of this species:—"They had begun to pair when we reached Kerguelen

* Sharpe, "Account of the collections made in Kerguelen's Land and Rodriguez during the Transit of Venus Expeditions, in the years 1874-5, p. 116." (1879).

† Coppinger, Cruise of the Alert, pp. 105-106, (1883).

‡ Thomson, Voy. H.M.S. Challenger, Narr. of the Cruise, Vol. I., part i., p. 359 (1885).

§ Kidder and Cones, Bull. U.S. Nat. Mus. Nat. Hist. No. 2, of Kerguelen Island, made in connection with the American Transit of Venus Expedition, 1874-5, p. 38, (1875); *id.* part ii., pp. 17, 18 (1876).

|| Eaton, Account of the collections made in Kerguelen's Land and Rodriguez during the Transit of Venus Expeditions in the year 1874-5, p. 117 (1879).

Island. The first egg was found on the 31st of October. Their burrows are about as small in diameter as the holes of Bank Martins (*Cotyle riparia*) or Kingfishers (*Alcedo ispidula*). They are made in dry banks and slopes where the ground is easily penetrable, and terminate in a large chamber on whose floor the egg is deposited. There is no specially constructed nest. Some of the burrows are branched, but the branches are without terminal enlargements, and do not appear to be put to any use by the birds. Before the egg is laid, both of the parents may be found in the nest-chamber, and may often be heard moaning in the day-time; but when the females begin to sit, their call is seldom heard, excepting at night, when the male in his flight to and from the hole, and his mate on the nest make a considerable noise."

Mr. Howard Saunders,* who described the eggs of this species obtained there amongst those of other birds frequenting the Australian Coast, writes:—"Ten eggs are all pure white, except where peat-stained, nearly equal at each end, or but very slightly pointed. Dimensions 1.5 x 1.1 inch."

Sir Walter Laurie Buller† in his Birds of New Zealand, records that "Mr. Burton found this Petrel breeding on Stephens Island in Cook's Strait. It also breeds on Karewa Island (off Tauranga) on the small islands of the Great Barrier, and on the Hen and Chickens."

In Australian waters this bird is most frequently found between Victoria and Tasmania, likewise in the seas washing the shores of South Australia and New South Wales, but in neither of the latter localities is it so plentiful as in Bass's Straits and the Tasmanian waters. The eggs of this species have been known to Australian oologists for some years past from numerous specimens taken on the smaller islands of Bass's Straits, they show no difference either in size and shape from those previously described by various authors. They are rounded ovals in form, some specimens being slightly pointed at the smaller end, others being nearly equal in size at each end, pure white when newly laid, but like those of other members of the *Procellarida*, soon becoming more or less stained and soiled as they approach the time of hatching. Average specimens measure as follows:—(A) 1.48 x 1.23 inch; (B) 1.6 x 1.2 inch; (C) 1.53 x 1.2 inch.

These birds were recently found breeding on North-East Island by the members of a party from the Field Naturalist's Club of Victoria, who paid a visit to the Kent Group in Bass's Straits, during November 1890; they were too late however to obtain any eggs the burrows at that time containing only young birds nearly fledged.

* Howard Saunders, Account of the collections made in Kerguelen's Land and Rodriguez during the Transit of Venus Expeditions in the year 1874-5, p. 174, (1879).

† Buller, Birds of New Zealand, Vol. ii., Second edition, p. 207, (1888).